

REPLACEMENT SHEET

FIG. 1

10	20	30	40	50	
1 MASTTPITME	DLQKALEAQ	RALRAGLAAG	ASQSRRPRPP	RHARLQHLPE	50
60	70	80	90	100	
51 MTPAVTPEGP	APPRTGAWQR	KDWSRAPPPP	EERQESRSQT	<u>PAPKPSRAPP</u>	100
110	120	130	140	150	
101 OQPOOPPRMOT	GRGGSAPRPE	LGPPTNPFQA	AVARGLRPPL	HDPDTEAPTE	150
160	170	180	190	200	
151 ACVTSWLMSE	GEGAVFYRVD	LHFINLGTTP	LDEDGRWDP	LMYNPCGPEP	200
210	220	230	240	250	
201 PAHVVRAYNQ	PAGDVVRGVNG	KGERTYAEQD	FRVGGTRWHR	LLRMPVRGLD	250
260	270	280	290	300	
251 GDTAPLPPHT	TERIETRSAR	HPWIRIRFGAP	OAFLAGLLA	AVAVGTARAG	300
310	320	330	340	350	
301 LQPRADMAAP	<u>PMPPQPPRAH</u>	GQHYGHHHQ	LPFLGHDGH	GGTLRVGQHH	350
360	370	380	390	400	
351 RNASDVLPGH	WLQGGWGCYN	LSDWHQGTHV	CHTKHMDFWC	VEHDRPPPAT	400
410	420	430	440	450	
401 PTSLTAAANY	IAAATPATAP	PPCHAGLND	CGGFLSGCGP	MRLPTALT	450
460	470	480	490	500	
451 AVGDLRAVHH	RPVPAYPVCC	AMRWGLPPWE	LVILTARPED	GWTCRGVPAH	500
510	520	530	540	550	
501 PGTRCPPELV	PMGRATCSPA	SALWLATANA	LSLDHAFAAF	VLLVPMVLIF	550
560	570	580	590	600	
551 MVCRRACRRP	APPSSPQSS	CRGTTPPAYG	EEAFTYLCTA	PGCATOTPVP	600
610	620	630	640	650	
601 VRLAGVGFES	KIVDGCCFAP	WDLEATGACI	CEIPTDVSCE	GLGAMVPTAP	650
660	670	680	690	700	
651 CARIMNGTOR	ACTFWAVNAY	SSGGYAOLAS	YFNPGG5YYK	OYHPTACEVE	700
710	720	730	740	750	
701 PAFGHSDAAC	WGFPTDTVMS	VFALASYVOH	PHKTVRVKFH	TETRTVMOLS	750
760	770	780	790	800	
751 YAGVSCNVTT	EHPFCNTPHG	QLEVQVPPDP	GOLVEYIMNY	TGNQQSRNGL	800
810	820	830	840	850	
801 GSPNCHGPDW	ASPVQCQRHSP	DCSRLVGATP	ERPRLRLVDA	DDPLLRATPG	850
860	870	880	890	900	
851 PGEVWVTPVI	GSQARKCGLH	IRAGPYGHAT	VEMPEWIAH	TTSDPMHPPG	900
910	920	930	940	950	
901 PLGLKFKTVR	PVALPRAALAP	PRNVRVTGCY	QCGTPALVEG	LAPGGGNCHL	950
960	970	980	990	1000	
951 TVNGEDVGAF	PPGKFVTAAL	LNTPPPYQVS	CGGESDRASA	GH.....	1000

REPLACEMENT SHEET

FIG. 3

	10	20	30	40	50	
1	MGARASVLSG	GELDRWEKIR	LRPGGKKKYK	LKHIVMASRE	LERFAVNPGL	50
	60	70	80	90	100	
51	LETSECCRQI	LGQLQPSLQT	GSEELRSLYN	TVATLYCVHQ	RIEIKDTKEA	100
	110	120	130	140	150	
101	LOKIEEEQNK	SKKKAQQAAA	DTGHSSQVSQ	NYPIVQNIQG	QMVHQAIISPR	150
	160	170	180	190	200	
151	TLNAMVKVVE	EKAFSPEVIP	MFSALSEGAT	PQDLNTHMLNT	VGGHQAAMQM	200
	210	220	230	240	250	
201	LKETINEEAA	EWDRVHPVHA	GPIAPGQMRE	PRGSDIAGTT	STLQEIQIGWM	250
	260	270	280	290	300	
251	TNNPPIPVGE	IYKRWIILGL	NKIVRMYSP	SILDIRQGPK	EPFRDYVDRF	300
	310	320	330	340	350	
301	YKTLRAEQAS	QEVKNWMTET	LLVQMANPDC	KTILKALGPA	ATLEEMMTAC	350
	360	370	380	390	400	
351	QGVGGPGHKA	RVLAEMSQV	TNTATIMMQR	GNFRNQRKMY	KCFNCGKEGH	400
	410	420	430	440	450	
401	TARNCRAPRK	KGCWKGKEG	HQMKDCTERQ	ANFLGKICL	TREGQGIFFR	450
	460	470	480	490	500	
451	ADQSQQPHHF	FRADQSQQPH	QKRASGLG			500

REPLACEMENT SHEET

FIG. 4

10	20	30	40	50		
1	MRVKEKYQHL	WRWGHKGTM	LLGILMICSA	TEKLKYTVYY	GVPVWKEATT	50
60	70	80	90	100		
51	TLFCASDAKA	YOTEVHNWYA	THACVPTOPN	PQEVVLYNVT	ENFNMMKNDM	100
110	120	130	140	150		
101	VEQMHEDIIS	LWDQSLKPCV	KLTPLCVSLK	CTDLGNATNT	NSNTNNSSG	150
160	170	180	190	200		
151	EMMMEKGEIK	NCSFNISTSI	RGKVQKEYAF	FYKLDIIPID	NOTTSYTLTS	200
210	220	230	240	250		
201	CNTSVITQAC	PKVSFEPIDI	HYCAPAGFAI	LKCNNKTFNG	TGPCTNVSTV	250
260	270	280	290	300		
251	QCTHGIRPVV	STQLLLNGSL	AEEEVIRSA	NFTDNAKTII	VQLNQSVEIN	300
310	320	330	340	350		
301	CTRPNNNTRK	SIRIQRGPGR	AFVTICKIGN	MRQAHCNISR	AKWNATLKQI	350
360	370	380	390	400		
351	ASKLREQFGN	NKTIIFKQSS	GGDPEIVTHS	FNCGGEFFYC	NSTQLFNSTW	400
410	420	430	440	450		
401	FNSTWSTEGB	NNTEGSDTIT	LPCRIKQFIN	MMQEVGKAMY	APPISGQIRC	450
460	470	480	490	500		
451	SSNITGLLT	RDGGNNNNGS	EIFRPGGGDM	RONWRSELYK	YKVVKIEPLG	500
510	520	530	540	550		
501	VAPTKAKRRV	VQREKRAVGI	GALFLGFLGA	AGSTMARSM	TLTVQARQLL	550
560	570	580	590	600		
551	SGIVQQQNNL	LRAIEAQQHL	LQLTYWGIKQ	LQARILAYER	YLKDQQLLG	600
610	620	630	640	650		
601	WGCSCGKLICT	TAVPMNASWS	NKSLEQIWMNN	MTWMMEMDREI	NNYTSLIHSL	650
660	670	680	690	700		
651	IEESQNQQEK	NEQELLELDK	WASLYNNWFNI	TNWYLWYIKIF	IMIVGGLVGL	700
710	720	730	740	750		
701	RIYFAVLSIV	NRVRQGYSPL	SFQTHLPTPR	GPDRPEGIEE	EGGERDRDRS	750
760	770	780	790	800		
751	IRLVNGSLAL	IWODLRSLCL	FSYHRLRDLL	LIVTRIVELL	GRRGWEALKY	800
810	820	830	840	850		
801	WNNLLQYMSQ	ELKNSAVSLL	NATAIAVAEG	TDRVIEVVQG	ACRAIRHIPR	850
860	870	880	890	900		
851	RIRQGLERIL	L				900

REPLACEMENT SHEET

FIG. 5

	10	20	30	40	50	
1	MKTTLKMTAL	AALSAFVLAG	CGSHQMKSEE	HANMQLQQQA	VLGLNYMQDS	50
	60	70	80	90	100	
51	GEYKALAYQA	YNAAKVAFDH	AKVAKGKKKA	VVADLDETHL	DNSPYAGHQV	100
	110	120	130	140	150	
101	QNNKPFDGKD	WTRWVDARQS	RAVPGAVEFN	NYVNNSHNGKV	FYVTNRKOST	150
	160	170	180	190	200	
151	EKSGTIDDMK	RLGFNGVEES	AFYLUKKOKSA	KAARFAEIEK	QGYEIVLYVG	200
	210	220	230	240	250	
201	DNLDDFGNTV	YGKLNADRRRA	FVDQNQGKFG	KTFIHLPNAN	YGGWEGGLAE	250
	260	270	280	290	300	
251	GYFKKDTQGQ	IKARLDAVQA	WDGK			300

REPLACEMENT SHEET

FIG. 6

	10	20	30	40	50	
1	<u>IOPPKNLLFS</u>	SLLFSSLLFS	SAAQAASEDR	RSPYYVQADL	AYAAERITHD	50
	60	70	80	90	100	
51	YPQATGANNT	STVSOYFRNI	RAHSIHPRVS	VGYDFGGWRI	AADYASYRKW	100
	110	120	130	140	150	
101	NNNKYSVNTK	ELENKHNNKK	DLKTENQENG	TFHAASSLGL	SAIYDFKLKG	150
	160	170	180	190	200	
151	KFKPYIGARY	AYGHVRHSID				200

FIG. 9

	10	20	30	40	50	
1	<u>MKVSAALLCL</u>	LLIAATFIPQ	GLAQPDAINA	PVTCCYNFTN	RKISVQLAS	50
	60	70	80	90	100	
51	YRRITSSKCP	KEAVIFKTIV	AKEICADPKQ	KMVQOSMDHL	<u>DKQTQTPKT</u>	100

FIG. 10

	10	20	30	40	50	
1	KSTTCCYRFI	NKKIPKQRLE	SYRRTTSSHC	PREAVIFKDK	EICADPTQKW	50
	60	70	80	90	100	
51	VQDFMKHLDK	<u>KTQTPKL</u>				100

REPLACEMENT SHEET

FIG. 7

			-11	-1		
		KLMI*K		6	
	10	20	30	40	50	
7	FVTKM*YKTL	DKYLRRRLIL	NISIV*K*LS	EKR*I*MNKK	KMILTSLASV	56
	60	70	80	90	100	
57	AILGAGFVAS	QPTVVRAEES	PVASQSKEK	DYDAAKKDAK	NAKKAVEDAQ	106
	110	120	130	140	150	
107	KALDDAKAAQ	KKYDEDQKKT	EEKAALEKAA	SEEMDKAVAA	VQQAYLAYQQ	156
	160	170	180	190	200	
157	ATDKAAKDAA	DKMIDEAKKR	EEEAKTKFNT	VRAMVVPEPE	QLAETKKKSE	206
	210	220	230	240	250	
207	EAKQKAPELT	KKLEEAKAKL	EEAEKKATEA	KQKVDAEEVA	PQAKIAELEN	256
	260	270	280	290	300	
257	QVHRLEQELK	EIDESESEDY	AKEGFRAPLQ	SKLDAKKAKL	SKLEELSDKI	306
	310	320	330	340	350	
307	DELDAAEIAKL	EDQLKAAEEN	NNVEDYFKEG	LEKTIAAKKA	ELEKTEADLK	356
	360	370	380	390	400	
357	KAVNEPEKPA	PAPETPAPEA	PAEQPKPAPA	PQPAPAPKPE	KPAEQPKPEK	406
	410	420	430	440	450	
407	TDDQQAEEDY	ARRSEEEYNR	<u>LTQQQPPKAE</u>	KPAPAPKTGW	KQENGMYYFY	456
	460	470	480	490	500	
457	NTDGSNATGW	LQNNGSWYYL	NSNGAMATGW	LQYNGSWYYL	NANGAMATGW	506
	510	520	530	540	550	
507	AKVNGSWYYL	NANGAMATGW	LQYNGSWYYL	NANGAMATGW	AKVNGSWYYL	556
	560	570	580	590	600	
557	NANGAMATGW	LQYNGSWYYL	NANGAMATGW	AKVNGSWYYL	NANGAMATGW	606
	610	620	630	640	650	
607	VKGDTWYYL	EASGAMKASQ	WFKVSDKHYY	VNGLGALAVN	TTVDGYKVNA	656
	660	670	680	690	700	
657	NGEWV*AD*I	KAC*EHLTF*	F*NKDKVRLN	RFMFVFFRY	706

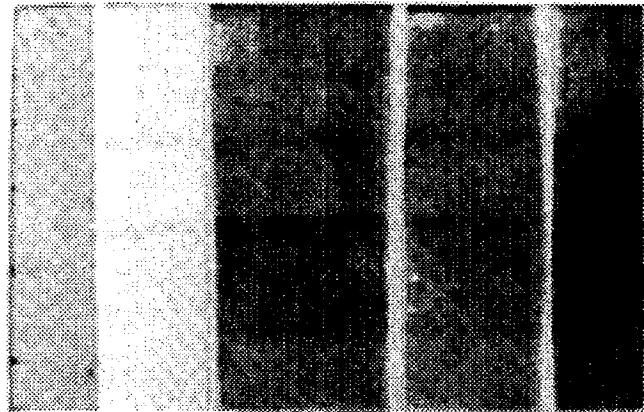
REPLACEMENT SHEET

FIG. 8

	10	20	30	40	50	
1	MNNMIKKATIAA	TAGIAVTAFR	APTIERSASTV	VVEAGDTLWG	IAQSKGTTVD	50
	60	70	80	90	100	
51	AIKKANNLTT	DKIVPGQQLQ	VNNEVAAAEEK	TEKSVSATWYL	NVRSGAGVON	100
	110	120	130	140	150	
101	SIITSIKGGT	KVTVETTESN	GMHKITYNDG	KTGFUNGKYL	TDKAVSTPVA	150
	160	170	180	190	200	
151	<u>PTQEVKKETT</u>	TQQAAPAAET	KTEVKQTTQA	<u>TTPAPKVAET</u>	KETPVVDQNA	200
	210	220	230	240	250	
201	TTHAVKSGDT	IWALSVKYGV	SVQDIMSWNN	LSSSSIYVGQ	KLAIKQTANT	250
	260	270	280	290	300	
251	<u>ATPKAEVKTE</u>	APAAEKQAAP	VVKENTNTNT	ATTEKKETAT	<u>QQQTAPKAPT</u>	300
	310	320	330	340	350	
301	EAAKPAPAPS	TNTNANKTNT	NTNTNTNTNN	TNTNTPSKNT	NTNSNTNTNT	350
	360	370	380	390	400	
351	NSNTNANQGS	SNNNSNSSAS	AIIAEAQKHL	GKAYSWGGNG	PTTFDCSGYT	400
	410	420	430	440	450	
401	KYVFAKAGIS	LPRTSGAQYA	STTRISES5QA	KPGDLVFFDY	GSGISHVGIY	450
	460	470	480	490	500	
451	VGNGQMINAQ	DNGVKYDNIH	GSGWGKYLVG	FGRV.....	500

REPLACEMENT SHEET

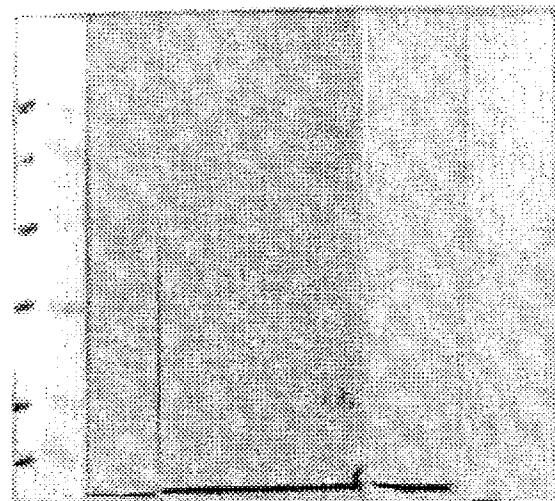
FIG. III



1 2/3 4/5/6 7/8 9/10

Immunoblots of RV antigens reacted with Mab's RV1, RV2, RV3 and RV4. RV antigen: Strain MPV-77 (lot# 50678, Catalogue# EL-05-04) cultured in Vero cells. Purchased from Microbix Biosystems Inc., Toronto, Ontario. All Mab used as tissue culture fluid diluted 1/500.
Lane 1 - Molecular weight Markers of 97, 66, 45, 31, 21, and 14 kD.
Lane 2/3 - RV4; Lane 4/5/6 - RV3; Lane 7/8 - RV2; Lane 9/10 - RV1
Lanes 2-9 all illustrate two proteins, 31 kD (major) and 45 kD (minor), identified by reaction with Mab's 1-4

FIG. 12



1 2 3 4/5 6/7

Immunoblots of bacterial antigens reacted with RV Mab RV1.

H.influenzae b antigen from ATCC (#10211); *L.monocytogenes* from ATCC (#7644); *S.pneumoniae* from the Caribbean Regional Epidemiology Centre, CAREC, Trinidad; *N.meningitidis* A from ATCC (#13077).

Lane 1 - Molecular weight markers of 97, 66, 45, 31, 21, and 14 kD.

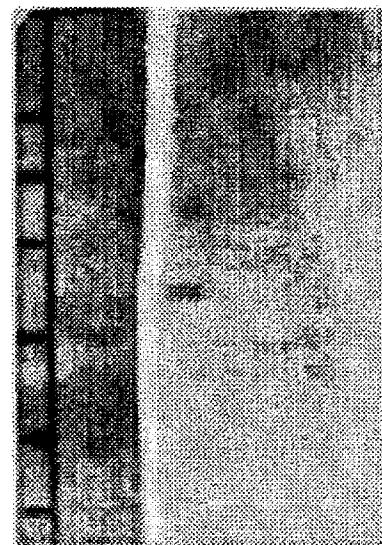
Lane 2 - *H.influenzae* b - proteins of approximate weights of 50, 45, 40, and 25 kD.

Lane 3 - *L.monocytogenes* - proteins of approximate weights of 60 kD (major) and 66 kD (minor).

Lane 4/5 - *S.pneumoniae* - proteins of approximate weights of 60 kD and 66 kD.

Lane 6/7 - *N.meningitidis* - a protein of an approximate weight of 18 kD. All proteins identified by reaction with Mab RV1.

FIG. 13



1 2 3/4

Immunoblots of HIV1 antigens reacted with RV Mab RV1.

HTLV-IIIB viral lysate, lot #54-040, purchased from Applied Biotechnologies, Inc., Md., USA.

Lane 1 - Molecular weight markers of 97, 66, 45, 31, 21, and 14 kD.

Lane 2 - Control RV antigens, 31 and 45 kD, reacting with RV1 Mab.

Lane 3/4 - HIV1 proteins of approximate weights of 24 kD and 61 kD, identified by reaction with Mab RV1.